

REMARKS

Reconsideration of the present application is again respectfully requested. The only outstanding rejection is that made over Nobuo et al. '478 and Swatloski et al. '329 under the provisions of 35 USC 103(a).

The '329 document (WO 03/029329) is acknowledged on page 6, last paragraph of the specification. The '329 document relates to dissolving cellulose in various ionic liquids, especially under microwave irradiation, and precipitating pure cellulose from the solution form by selected solvents. As explained previously, and in the specification on page 1 to page 2, line 3, normal starch comprises amylose and amylopectin. The main component is amylopectin which is a very large molecule with a branched structure and having a molecular weight from one to several millions, whereas cellulose is a linear polymer having a considerable smaller molecular weight, typically a few hundred thousands. Also, the glucoside bonds of cellulose are different from those of amylopectin/amylose. It is generally acknowledged that as the molecular weight of polymers increases, the more difficult it is to dissolve the same in a solvent. Thus, based on the teaching of Swatloski et al. '329, it is not obvious that starch could be dissolved and esterified in an ionic solvent.

The Examiner states at page 5, line 3 of the Office Action dated June 17, 2008 that Swatloski et al. do not teach esterification or derivatization of starch. However, Swatloski et al. '329 appear to teach esterification (acylation) of cellulose on page 8 of the reference.

The Examiner's main argument seems to be that since agarose (Nobuo et al. '478), cellulose (Swatloski et al. '329) and starch (present invention) are all polysaccharides, the teachings of the cited references are applicable to starch, or the skilled artisan would at least have had a reasonable expectation of success (pages 5-6 of the Office Action). It is respectfully submitted that this is a hindsight reconstruction, and that the Examiner has totally disregarded the fact that starch is structurally different from agarose and cellulose, and that starch is also

contrary to these substances believed to be practically insoluble in solvents (other than water which cannot be used as a solvent in esterifications).

As set forth on page 7, lines 20-24 of the specification, the present invention is based on the surprising discovery that native starch as well as hydrolyzed starch can be dissolved in an ionic liquid, the dissolved starch can be acetylated with acetic anhydride without any catalysts, and the acetylated starch ester can be precipitated from the reaction medium by the addition of various alcohols.

A detailed discussion of obviousness is set forth on pages 8-10 of the Amendment filed on April 15, 2008. Based on those principles, it is again submitted that the Examiner has failed to present a *prima facie* case of obviousness in relation to the cited prior art. Combining known prior art elements is not sufficient to render the claimed invention obvious if the results would not have been predictable to one of ordinary skill in the art. *United States v. Adams*, 383 U.S. 39, 51-52, 148 USPQ 479, 483-84 (1966); *see also* M.P.E.P. § 2143. The rationale should be made explicit, *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007), and the Examiner must interpret the reference as a whole and cannot pick and choose only those selective portions of the reference which support the Examiner's position. *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988) ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.").

Therefore, the rejection under 35 USC 103 should be withdrawn.

In view of the above remarks, reconsideration of the rejection and favorable action on all of the claims are earnestly solicited.

A request for suspension of action for three months is being submitted herewith together with the Request for Continued Examination and appropriate fee.

Application No. 10/566,975
Response dated November 17, 2008

Docket No.: 0696-0229PUS1

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Raymond C. Stewart Reg. No. 21,066 at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

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